

ABSTRACT OF THE DISCLOSURE

The "HOT DRINK CUP LID WITH COOLING AIR-FLOW" is an article of manufacture with a uniquely designed form arranged so that the hot liquid is cooled by an air-flow drawn over the liquid as it is sipped. The unique design, placement of the drinking hole and cooling air-flow hole create a structure whereby hot liquid can be cooled and sipped in a manner that reduces the temperature of the hot liquid as it transfers from the cup to the user. This cooling action is activated by the suction caused by the action of the user sipping at the drinking hole and concurrently drawing air from outside of the cup down through the air-flow hole and up through the drinking hole along with the hot liquid. Thus the hot liquid is cooled as the air is drawn up in conjunction with the hot liquid through the drinking hole.

Hot Drink Cup Lid with Cooling Air-Flow
Constance L. Pitts

DRAWINGS

Figure 1 -- HOT DRINK CUP LID WITH COOLING AIR-FLOW (perspective)

Legend

1. lid
2. mounting portion which mates with the associated container
3. recessed channel
4. raised portion
5. drinking area plane
6. drinking hole
7. recessed portion
8. cooling air-flow hole
9. angled portion
11. raised portion opposite the drinking hole
15. angular raised portion
16. angular recessed portion

Figure 2 - Side View

Legend

1. lid
2. mounting portion which mates with the associated container
3. recessed channel
4. raised portion
5. drinking area plane
6. drinking hole
7. recessed portion
8. cooling air-flow hole

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- 9. angled portion
- 15. angular raised portion
- 16. angular recessed portion

Figure 3 -- Top View

Legend

- 1. lid
- 2. mounting portion which mates with the associated container
- 3. recessed channel
- 5. drinking area plane
- 6. drinking hole
- 8. cooling air-flow hole
- 9. angled portion
- 15. angular raised portion
- 16. angular recessed portion

Figure 4 -- Sectional View

Legend

- 1. lid
- 2. mounting portion which mates with the associated container
- 3. recessed channel
- 4. raised portion
- 5. drinking area plane
- 6. drinking hole
- 7. recessed portion
- 8. cooling air-flow hole
- 9. angled portion
- 11. raised portion opposite the drinking hole
- 15. angular raised portion

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16. angular recessed portion

Figure 5 -- Diagrammatic View of Lid in Use.

- 1. lid
- 6. drinking hole
- 8. cooling air-flow hole
- 13. action path of air and liquid flow
- 14. cup
- 17. hot liquid/beverage